



# THE KNIGHT FLYER



February 9, 1993

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Editor :Dave Barren

## BOARD MEETINGS:

FEBRUARY 23, 1993

MARCH 16, 1993

APRIL 6, 1993

APRIL 27, 1993

MEETINGS AT THE WEST END HOTEL AT 7:30 PM

CLUB MEETINGS: HELD AT SENIOR CITIZEN BLDG. 8:00PM

FEBRUARY 26, 1993

MARCH 19, 1993

APRIL 9, 1993

APRIL 30, 1993

## LEADER CLUB STATUS

We have just recieved word from AMA informing us that the Flying Knights of Hamburg N.Y. have qualified for Leader Club status.

A copy of the letter is being sent to Gus Pandajis our AMA AVP. After Gus recieves our letter the awards will be sent to him, and he will contact us concerning the distribution.

Ruth suggested that we invite Gus for a meeting around April. We will keep you posted as to the dates Gus can make.

**FLIGHT LINE:** Well February's first meeting has come and gone. We had our little after meeting auction on the 5th, and it was dismal in a word. Seems like nobody could remember that we were having one, or figured no one was in the buying mood anyway. Sad to say but if thats any indication of the event, then I suggest that we don't bother with that event any more.

On a brighter note, the Chinese Auction coming up is a much better event.... ED.

## COMING EVENTS CALENDAR

FEBRUARY 26, 1993 OUR OWN FAMOUS CHINESE AUCTION TO BE HELD FOLLOWING THE REGULAR MEETING.

MARCH 4 THRU 7 1993 MC KINLEY MALL SHOW, SETUP ON THE 4TH.

MARCH 21, 1993 RC AIRCRAFTERS ANNUAL R/C AUCTION AT THE MARIGOLD MANOR.

APRIL 2-4 1993 TOLEDO SHOW

MAY 15, 1993 FLYING KNIGHTS 30TH ANNIVERSARY DINNER, ALL MEMBERS INVITED.

JULY 9-11 1993 CANADIAN NATIONALS

JULY 9-11 1993 STARS SCALE RALLY AT OLEAN N.Y .

SEPTEMBER 26, 1993 FLYING KNIGHTS 2ND ANNUAL R/C AUCTION AT THE IRON WORKERS HALL IN WEST SENECA NEW YORK.

## NEW TECHNOLOGY

According to Farm Journal magazine, April, 1992, new technology may make agricultural crop dusting possible with RC airplanes. David Orr, an Iowa State University entomologist has directed a study using unmanned aerial vehicles(UAV) to apply biological controls for European corn borer. According to Orr, the RC planes have the potential to cover commercial acreage with a variety of crop protectants.

A model builder was employed to construct two planes, modifying standard kits to fit the needs of the experiment. With a flight time averaging 1/2 hour, the fuselage was modified to contain a hopper holding 5 gallons of disease organisms and borer parasites or parasite eggs mixed with a carrier. A gallon of the protectorant could cover up to 50 acres. Increased fuel and load capacities (continued on page 2)

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or larger UAV's could increase the coverage.

The planes have several advantages over standard aircraft. While listing the advantages of the small aircraft, Orr said, "They're relatively inexpensive, safer (no pilot), efficient and highly accurate. You can deliver materials at speeds as low as 25 mph; get less drift. You can use them more easily near buildings. And they could be very useful for spot spraying."

Biocontrols reduce the reliance on chemicals and help the environment.

## Hall show:

PROGRESS IS BEING MADE EVEN AS YOU SIT IN THE COMFORT OF YOUR SHOP AND SLAVE OVER THAT SPECIAL PROJECT YOU'VE BEEN WANTING TO DO FOR YEARS. WE'VE GOT THE SPACE WE NEED FOR THE DISPLAY. THE TABLES WE'RE NOT SURE OF YET, HOPEFULLY THE MALL IS GOING TO HAVE ENOUGH FOR US WITHOUT HAVING TO DRAG SOME IN FROM ANOTHER PLACE. MR. PAUL NOSBISCH WILL BE REPRESENTING THE NATIONAL WARPLANE MUSEUM, AND AS USUAL WILL HAVE QUITE A DISPLAY. HOPEFULLY WE WILL HAVE A REPORT FROM OUR MALL REP, BRUCE AT THE NEXT MEETING SO WE CAN LET YOU KNOW ANY LAST MINUTE DETAILS.

**NOTICE:** This issue contains our new telephone tree. This will enable us to get information out between regular newsletters if a matter needs immediate attention.

### **POST YOUR PHONE TREE WHERE IT WON'T GET LOST !!!**

## RUST - BY JOE DIEFENBACH -

Owners of four-stroke engines know that when they open their engine and look inside, they see a nightmare come true: all the steel parts of their expensive engine are covered with a brownish film. This brownish film is - you guessed it - rust. "Must be bad fuel" the man at the local hobby shop says and recommends to buy this "super turbo fuel" which is supposed to prevent this disease. Rest assured, it is not the **unburned** fuel which causes this problem, so no fuel can keep your engine healthy.

So, where the heck is this rust coming from? The engines, especially four-stroke engines, rust because, with one exception, they do not have a constant throughput of fresh air-fuel mixture in the crankcase. What does this mean? Some of the combustion products of the methanol based fuel and air, along with the oil, seep into the piston and cylinder wall and into the crankcase. The crankcase is relatively cool, so these vapors condense and happily accumulate now in the liquid state.

What are these mysterious combustion products? Mainly water(!), carbon dioxide, formic acid(!), formaldehyde and other mean stuff. Remember the note in the instruction manual for your engine, to always run it in a well-vented area: That's why! The components with the (!), are the real bad guys. They form an acidic puddle in the crankcase which is strong enough to eat steel parts with ease. Normally the bearings go first. To make a bad situation worst, the oil which comes down from the combustion chamber gets thermally degraded in the process and is now aggressive itself. Unlike car engines, which run on gasoline and use oils with special additives to prevent corrosion, **the oils used in model airplane fuels can not prevent this corrosion**, no matter what the manufacturers or dealers claim.

What can you do for the health of your engine? If you plan not to run the engine for more than 24 hours, you need to drain all the residue from the crankcase and inject three to four pump strokes of penetrating oil, "marvel mystery oil" or other low viscosity oil and then manually turn the engine over a few times. If you want to retire the engine for more than two months, you should drain this oil and refill with fresh oil this is a messy job, but it's the only way to get a longer life out of your expensive engine. Happy flying and have a long bearing life!